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09/935,238	08/21/2001	Ishita Sharan	CISCP215/97021	1220
22434	7590	08/25/2008		
BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2616	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/935,238

**Applicant(s)**

SHARAN ET AL.

**Examiner**

Hanh Nguyen

**Art Unit**

2616

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed 6/4/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 and 23-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21, 23-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**  
***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-21, 23-64 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent No. 6,031,841 ("Woundy").

*Regarding claims 1, 21, 42, 54, 61, 62, 63,* Woundy teaches a method and system for filtering messages communicated between a cable head end and one or more cable modems (classifying QOS traffics between headend 12 and cable modems 22 in cable network 10, See Fig. 1; col.1, lines 20-45) comprising of : obtaining a message at a cable modem termination system ( CMTS) (see fig.1 and 2, step 202; intercepting downstream path message at CableModem Termination System), wherein the message is received from a cable modem or is to be transmitted to a cable modem ( see col.2,

lines 40-47; CMTS transmits to CM to announce allocation of SID); determining at the CTMTS whether the message meets filtering criteria (Examiner interpretes the "filtering criteria" as "Service ID" which is indicated in specification, page 12, lines 18-22; therefore, Woudy teaches in col.1, lines 32-45 & col.2, lines 15-20, that packet classifier determines QOS class of packet and uses a SID in "filter spec" to match particular source IP address. The SID is generated at the CMTS to indicate at least one filter parameter for the reserved resources); and when the message meets the filtering criteria (filter spec by classifier), copying the message into a memory ( see fig.2, step 204, col.3, lines 1-5; CMTS stores path state from the message); sending the message including the payload to a memory device (see fig.2,col. 3, lines 1-10; the CMTS at step 204 stores path message and forwards the message at step 208 to cable modem at step 210). Woudy further teaches the obtaining ( see fig.2, step 202, col.3, lines 2-5; CMTS intercepts path message); determining ( col.2, lines 15-20), the copying step ( see fig.2, step 204), and the sending step ( see fig.2, steps 208, 210) are performed by a cable modem termination system ( see fig.1.col.1, lines 17-25, cable headend 12 uses at least one cable modem termination device ( CMTS) 18 to distribute received signals to user computers 16).

Regarding claim 64, Woudy discloses the filtering criteria are not applied by one of the cable modem ( see col.2, lines 42-52; CMTS transmits dynamic session addition message comprising SID value, type/length values which encodes a filter specification).

*Regarding claims 2 and 23*, Woudy further teaches that when the received message is to be transmitted to a cable modem, forwarding the received message to

the cable modem (step 208; fig.2, col.3, lines 1-10 ), and when the received message is from a cable modem, processing the received message at the cable head end (206) (See Fig. 2, Col. 2, line 64 to Col. 3, line 34; steps 202, 204, 208).

*Regarding claim 4, 25 and 44*, Woundy teaches the message type is for bandwidth allocation, inherently a MAP type message (See Fig. 1, Col. 2, lines 8-23; and col.1, lines 30-35; SID generated by CMTS in accordance with time allocation map ( MAP message)).

*Regarding claim 3, 24 and 43*, Woundy teaches the filtering criteria specifies a message type and the received message meets the filtering criteria when the received message has the specified message type (See Fig. 2, Col. 3, lines 15-20; step 218; CMTS receives the reservation message and processes message flow specification).

*Regarding claim 5, 26*, Woundy further teaches that the filtering criteria further specifies one or more service identifiers and the filtering criteria is met when the received message is a MAP message that contains any specified service identifier (See Col 1, lines 30-35; SID are generated by CMTS in accordance with time allocation map ( MAP message)).

*Regarding claim 6 and 27*, Woundy further teaches that the filtering criteria farther specifies one or more MAC addresses and the filtering criteria is met when the received message is a MAP message that contains any specified MAC address (See Col 1, line 64 to Col. 2, line 7; and lines 40-45; providing MAC message management to allow upstream reservation by cable modem ).

*Regarding claim 7, 28 and 45*, Woundy further teaches that the filtering criteria further includes an option to append a time stamp to the copied message (See Fig. 1, Col. 1, line 28-32; respect to downstream bandwidth, end users share bandwidth in accordance with a time sharing allocation protocol indicated in a predetermined time allocation map).

*Regarding claims 8, 29 and 46*, Woundy further teaches that the filtering criteria further includes an option to strip a MAC Management Header from the copied message (See Fig. 1, Col. 1, line 63 - Col. 2, line 9).

*Regarding claims 9, 30 and 47*, Woundy further teaches that the message type is a dynamic service message (See Fig. 1, Col. 2, lines 1-10; Dynamic service messages comprising Dynamic session addition, Dynamic session deletion, Dynamic session ack).

*Regarding claims 10 and 31*, Woundy further teaches that the filtering criteria further specifies one or more service identifiers and the filtering criteria is met when the received message is a dynamic service message that contains any specified service identifier (See Fig. 1, Col. 2, lines 1-18; with message of dynamic session addition, CMTS generates SID to indicate at least one filter specification designated for a cable modem ).

*Regarding claims 11 and 32*, Woundy further teaches that the filtering criteria further specifies a dynamic service message type and the filtering criteria is met when the received message is a dynamic service message that contains the specified dynamic service message type (See Fig. 1, Col. 2, lines 1-10; Dynamic service

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messages comprising Dynamic session addition, Dynamic session deletion, Dynamic session ack).

*Regarding claim 12, and 33*, Woundy further teaches that the dynamic service message type is selected from a group consisting of a message for adding, a message for deleting, and a message for changing one or more services (See Col. 2, lines 1- 9; Dynamic service messages comprising Dynamic session addition, Dynamic session deletion).

*Regarding claim 13, and 34*, Woundy further teaches that the filtering criteria further include an option to append a time stamp to the copied message (See Fig. 1, Col. 1, line 18-61).

*Regarding claims 14 and 35*, Woundy further teaches that wherein the filtering criteria further includes an option to strip a MAC Management Header from the copied message (See Fig. 1, Col. 1, line 63 - Col. 2, line 9).

*Regarding claims 15, 36 and 48*, Woundy further teaches that the filtering criteria specifies one or more service identifiers ( see col.2, lines 15-20; SID is generated by CMTS to indicate the filter parameter) and the filtering criteria is met when the received message contains any specified service identifier (See Fig. 1, Col. 1, line 28-35; end user is allocated bandwidth in accordance with SID in a predetermined time allocation map).

*Regarding claim 16, 37 and 49*, Woundy further teaches that the filtering criteria specifies one or more MAC addresses and the filtering criteria is met when the received

message contains any specified MAC address ( the message type is for bandwidth allocation, inherently a MAP type message; See Fig. 1, Col. 2, lines 8-23).

*Regarding claim 17, 38 and 50*, Woundy further teaches that the filtering criteria specifies one or more access control type parameters and the filtering criteria is met when the received message contains any specified access control type parameter (See Col 1, lines 40-50; packet scheduler uses "flow spec" to identify packet parameters such as peak data rate, etc. to identify the desired QOS).

*Regarding claim 18, 39 and 51*, Woundy further teaches that the filtering criteria specifies either a downstream or downstream direction and the filtering criteria is met when the received message is associated with the specified direction (See Col 1, lines 18-61; ).

*Regarding claim 19, 40 and 52*, Woundy further teaches that the filtering criteria specifies one or more ports and the filtering criteria is met when the received message is associated with any specified port (See Col 1, lines 18-61).

*Regarding Claims 20, 41 and 53*, as discussed above, Woundy teaches memory device forms part of a computer system that is accessible via a computer network ( see fig.1, see col.1, lines 17-30; user computers 16 as being known in the art, comprises memory device , and forms a computer network which are connected to cable network 12).

Regarding claims 55, 56, Woundy discloses selecting the message filtering criteria at the CMTS ( see col.2, lines 45-55, CMTS encodes RSVP filter spec in the Dynamic



session addition message transmitted to cable modem to announce the allocation of a new SID to a cable modem. The cable modem uses the new SID exclusively for upstream traffic that match the filter spec).

Regarding claims 57, Woundy discloses the memory device is coupled to the CMTS ( see fig.1 ).

Regarding claim 58, Woundy discloses memory device is separated from the computer system ( see fig.1, ).

Regarding claim 59, Woundy discloses the memory device is accessible via a computer network (see fig.1, users computers 16 form a computer network through which memory device is accessible ).

In claim 60, Woundy discloses memory device is coupled to a monitor station ( see fig.1; cable headend).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cummings ( US Pat. 7161945);

Fijolek et al. ( US Pat. 6510162);

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272

3092. The examiner can normally be reached on Monday-Thursday from 8AM to 4:30.

The examiner can also be reached on alternate.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on 5712722092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hanh Nguyen/  
Primary Examiner, Art Unit 2616